Center for Chemical Separations

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Overview

Current State Contract	$140,000
Matching Funds	$373,963
Cumulative	$1,466,120
Industry Jobs Created	9
Center Related Jobs	6

Benefiting Utah Companies
IBC Advanced Technologies, Inc.

Patents Applied	19
Patents Issued	2
License Agreements	2

Technologies

*Pilot plant scale up for individual separations

*Individually designed macrocycles for molecule separations

*Patented technique for attaching macrocycles to solid substrate allows for reuse

*Ligand bonded silicagel (superlig TM) technology

*Researching use of superlig materials to remove selected components from highly acidic radioactive waste

*Set up pilot plants in 4 of the largest precious metal refineries in the USA. Metals of interest are rhodium, platinum and palladium

*Negotiations nearly completed for a grant from Thiokol to develop materials for the removal of ppm amounts of halocarbons from culinary and waste water streams

Status

*Methodology for precious metals separations developed

*Selling product to industry

*One patent issued 13 applied for

*Need to develop capability in gas, high purity materials and biological separations

*Capability in environmental, analytical & precious metals markets

*Battelite Pacific Northwest Laboratories are funding radioactive cleanup studies

*19 patent applications filed

*12 patent applications being prepared

*2 patents issued

*Work progressing well on $150,000 SBIR Grant

*Superlig TM materials capable of making quantitative separations

Economic Impact

*Created spin-off company IBC with 6 jobs & sales projected $800K in 1990

*Company attracting many sources of growth capital

*Process for separating platinum rhodinum represents a 40-60% cost reduction to the industry

*Enables highly trained scientists, engineers and executives to remain in Utah

*Potential for developing multi-million dollar system to clean up accumulated nuclear waste